



Science Fair 2009

4th and 5th Grade, Due Monday, Feb. 2nd

It's time for Science Fair! Science Fair is mandatory for 4th and 5th grade students. Science is fun, and our goal is to get kids involved in science early through hands-on projects. Although the projects will not be graded against each other (no prizes), these projects will be judged by outside judges, so they must be turned in on time.

This should be fun and engaging, and geared to the child's age and abilities. Science Fair projects are based on the Scientific Method, which is a way of asking questions about the world around us and how it works, and then designing experiments to address those questions. The key point is "experiment" using this method. Students will need up to about 2-4 weeks if they are growing plants, so give yourselves plenty of time.

Note to parents: by fourth and fifth grade, students are capable of observing, measuring, and identifying properties, seeking evidence and recognizing patterns and cycles, identifying causes and effect, and designing and conducting controlled experiments (this last point is more 5th grade).

Take Chances...Make Mistakes and Get Messy!!!

Please start with the following guidelines:

1. See the Science Project Guidelines and Resources Packet.
2. Keep the projects appropriate for this age group (students this age aren't likely to design methods to test nuclear fusion!). There are examples attached and the web sites suggested have grade-appropriate projects that are great for older elementary children.
3. Neatness counts! Don't worry if project parts are not typed. We want them to do the work, but a good guide is that if you can't read it, the teacher won't be able to either. Parent help is appreciated, and welcome, but rather than doing it for them, guide your child through organizing it and putting it together themselves.
4. Poster board is fine, or they can use tri-fold presentation boards (available at Office Depot or Staples usually). **These projects should not be expensive!** Be inventive, use color, make simple graphs, make models or simple demos. Pictures are worth a thousand words.
5. When helping your child put their project together for display, a good guide is to have them explain it to you or a brother or sister. That helps them decide what's important to

put on their display to make it understandable.

If you are unsure about level of difficulty, check out:

http://www.nsrconline.org/curriculum_resources/elementary.html#AgeAppropriate

This is a science curriculum program out of the Smithsonian Institute, but it has a nice explanation of what each of the different grades is capable of in terms of understanding the scientific process.

Suggested websites (just a few are included, there are tons! Below are specific science fair sites and geeky fun science sites!):

<http://www.all-science-fair-projects.com/>

<http://school.discovery.com/sciencefaircentral/scifairstudio/ideas.html>

<http://www.ipl.org/div/kidspace/projectguide/>

<http://www.nceas.ucsb.edu/nceas-web/kids/>

<http://faculty.washington.edu/chudler/fair.html>

<http://www.isd77.k12.mn.us/resources/cf/welcome.html>

<http://www.tryscience.org/>

<http://www.ars.usda.gov/is/kids/fair/ideasframe.htm/>

<http://earthquake.usgs.gov/4kids/sciencefair.html>

<http://www.juliantrubin.com/fairprojects.html>

<http://www.sciencemadesimple.com/projects.html>

Remember that your media center is also open Tuesday evenings during school if you need access to a computer.